PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference	FOR FURTHER ACTION	V See Porm PC	T/IDRA/A16			
030044PC						
International application No.	International filing date (day/	month/year) I	Priority date (day/month/year)			
PCT/SE 2004/000129	02-02-2004		25-03-2003			
International Patent Classification (IPC) or national classification and IPC						
H04H 1/00	H04H 1/00					
·						
Applicant	A = 12 =					
AIRNET HOLDINGS AB et	al					
			international Preliminary Examining			
Authority under Article 35 and tr		_				
2. This REPORT consists of a total		luding this cover sl	ica.			
3. This report is also accompanied b	y ANNEXES, comprising:	•				
s. (sent to the applicant	and to the International Burea	nu) a total of 2	sheets, as follows:			
and/or shects	sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).					
sheets which	supersede earlier sheets, but wh	hich this Authority	considers contain an amendment that goes			
beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.						
b. (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s))						
	, containing a s	sequence listing an	d/or tables related thereto, in computer			
readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).						
4. This report contains indications re	elating to the following items:					
Box No. I Basis o	f the report					
Box No. II Priority	•		•			
Box No. III Non-≪	tablishment of opinion with reg	gard to novelty, inv	entive step and industrial applicability			
Box No. IV Lack of	funity of invention		·			
Box No. V Reason applica	Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement					
Box No. VII Certain defects in the international application						
Box No. VIII Certain observations on the international application						
Date of submission of the demand Date of completion of this report						
San or sandingolou of the delibera	Da	or completion of	- more			
12-10-2004	22	22-06-2005				
Name and mailing address of the IPEA/S		Authorized officer				
Patent- och registreringsverket Box 5055						
8-102 42 STOCKHOLM		Elisabet Åselius/MN				
Facsimile No. +46 8 667 72 88 Telephone No. +46 8 782 25 00 Form PCT/IPEA/409 (cover sheet) (January 2004)			8 782 25 00			

.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International	enpl	icarl	on	N	٥,	
---------------	------	-------	----	---	----	--

			PCT/SE	2004/000129		
Box	No. I	Basis of the report				
1.	COLCA	regard to the language, this report is based on the international application vise indicated under this item.	in the languag	e in which it was filed, unless		
	\boxtimes	This report is based on a translation from the original language into the following language which is the language of a translation furnished for the purposes of:				
	•	International search (under Rules 12.3 and 23.1(h))		•		
		publication of the international application (under Rule 12.4)				
		international preliminary examination (under Rules 55.2 and/or 55.3)			
2.	Jumusi	regard to the elements of the international application, this report is based to the receiving Office in response to an invitation under Article 14 are see not unnexed to this report):	od on (replace referred to in t	ement sheets which have been his report as "originally filed"		
		the international application as originally filed/furnished				
	\boxtimes	the description:				
		pages <u>1-7</u>		as originally filed/furnished		
		pages* received by this Author				
		pages* received by this Authori	lty on			
	\boxtimes	the claims:		<u> </u>		
		pages		as originally filed/furnished		
		pages* as amended (to	ogether with an	y statement) under Article 19		
		puges* 1-2 received by this Authori	ity on <u>22-0</u>	02-2005		
	_	pages* received by this Authors	ity on			
	\boxtimes	the drawings:				
		pages 1		as originally filed/fornished		
		Pages* received by this Authori	ty on			
	<u>г</u>	pages" received by this Authori				
		a requence listing and/or any related table(s) - see Supplemental Box Relating	ig to Sequen⇔	Listing.		
3.		The amendments have resulted in the cancellation of:				
		the description, pages				
		the claims, Nos.				
		the drawings, sheets/figs				
		the sequence listing (specify):				
		any mble(s) related to the sequence listing (specify):				
4.		This report has been established as if (some of) the amendments annexed made, since they have been considered to go beyond the disclosure as filed, 70.2(c)).	to this report a as indicated in	and listed below had not been in the Supplemental Box (Rulo		
		the description, pages				
		the claims, Nos.				
				· •		
		the sequence lieding (as well-the				
		any table(s) related to the sequence listing (specify):				
.	If item 4 applies, some or all of those sheets may be marked "supersoded."					
moor	PCT/IP	EA/409 (Box No. 1) (January 2004)				

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/SE 2004/000129

Box No. V Reasoned statement und citations and explanation		nder Article : Hons supporti	cle 35(2) with regard to novelty, inventive step or industrial applicability; orting such statement		
1. Statemen	t				
Nove	elty (N)	Claims Claims	1-5	YES NO	
Inver	ntive step (IS)	Claims Claims	1-5	YES NO	
Indus	trial applicability (IA)	Claims Claims	1-5	YES NO	

2. Citations and explanations (Rule 70.7)

The claimed invention relates to a method for sending large volumes of information to one or more personal computers from a database, via a digital high-speed network such as a DAB radio network, in a way that minimizes the time the personal computer has to spend online.

Documents cited in the International Search Report:

- "IP based enhanced data casting services over radio broadcast networks" Kellerer, w. et al.
- D2: "A distributed proxy server system for wireless mobile Web service" Kisup k. et al.
- D3: WO 9914775 A1
- D4: GB 2313981 A
- D5: US 2003/0054804 A1
- D6: WO 0178350 A1

D1 describes a method of sending large volumes of information from a database to one or more personal computers or corresponding devices via a DAB radio network, (fig.1). A proxy server is provided between the personal computer and the server, (fig.5). The proxy server may store the information and check that the information is complete, (section 3.3). The information may be given an identification code in order to make it readable only to the terminal that requested the information, (p.201, col.2).

Documents D2-D6 reveal the state of the art concerning information transfer via DAB.

D1-D6 do not mention that a proxy server selectively either forwards the information directly, or checks whether it is complete first. Nor do the documents mention that there is a proxy server on the side of the sender. Thus, the claimed invention fulfils the requirements of novelty, inventive step and industrial applicability.

5

10

15

20

25

30

The Swedish Patent Office PCT International Application

°CT / SE 2004 / 0 0 0 1 2 9

JC12 Rec'd PCT/PTC 2 4 SEP 2005

CLAIMS

1. A method of sending large volumes of information to one or more personal computers (1) or corresponding devices from a database (2) or corresponding device, such as a company's product line stored in connection with the company's home page or a portal, wherein the personal computer (1) can be connected, via a communications network (5), such as the Internet, to said database (2) which includes a computer in the form of a server (6), wherein the database contains said information and wherein a user is able to ask for information during such a connection via the personal computer (1) wherein a digital network (7-10) having a high transmission speed, such as a DAB radio network, comprising a transmitter means (7) and a receiver (8) can be caused to send said requested information and wherein the information is caused to be received by a receiver (8) in the possession of the user, wherein requested information in the database (2) is given an identification code which is sent to said receiver (8), wherein said receiver is caused to analyse the received DAB signal with regard to said identification code, wherein the method is characterised by providing a so called proxy server between the personal computer (1) and the server (6), respectively between said server (6) and said transmitter means (7) wherein said proxy server (4) is caused selectively to either forward the collected information to the transmitter means (7) for transmission of said information via said radio network (7-10), so that said information can be received in the receiver (8), or to alternatively be transparent for the exchange of information between the server (6) and the personal computer (1), wherein when it is chosen to transfer requested information from the server (6) via said network (7-10) to said receiver (8), via the proxy server, the proxy server (4) is caused, in response to a request for certain information to the personal computer (1) from the server (6), to fetch said information from the server (6) and therewith check that the information is complete, i.e. that all packets of information have been received, and wherein the proxy server is caused to store the complete collected information and to forward said information to the transmitter means (7).

2. A method according to Claim 1, characterised by causing the transmission of information via the radio network (7-10) to be effected without the influence of a possible communications link from the personal computer (1) to the server (4); and by causing the received information to be sent to the personal computer (1).

The Swedish Patent Office PCT International Application

'CT / SE 2004 / 0 0 0 1 2 9

2 2 -02- 2005

2

- 3. A method according to Claim 1 or 2, characterised by making said choice prior to fetching said information from the server (6) to the proxy server (4).
- 4. A method according to Claim 1, 2 or 3, characterised by causing said information to be sent in the form of an information block that includes specific information requested by the personal computer (1).
- A method according to Claim 1, 2, 3 or 4, characterised by causing the requested information to be sent at given time points or as soon as possible; and by causing the proxy server (4) to send to the personal computer (1) a message as to when information requested by the personal computer (1) will be sent.
- 6. A method according to any one of the preceding Claims, characterised in that the digital network is a DAB radio network.

15

10